

Claims

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1. A method for protecting a T cell from cell death, comprising contacting the T cell with at least one agent which augments bcl-X<sub>L</sub> protein level in the T cell such that the T cell is protected from cell death.
  2. The method of claim 1, wherein the at least one agent is a combination of agents stimulating T cells.
  3. The method of claim 2, wherein the combination of agents comprises a first agent which provides a primary activation signal to the T cell and a second agent which provides a costimulatory signal to the T cell.
  4. The method of claim 3, wherein the second agent is a ligand of the CD28 molecule on the T cell.
  5. A method for protecting a T cell from cell death, comprising introducing into the T cell a nucleic acid molecule encoding a form of bcl-X<sub>L</sub> protein, such that the T cell is protected from cell death.
  6. The method of claim 5, wherein the nucleic acid molecule is a bcl-X<sub>L</sub> expression vector comprising a nucleotide sequence encoding a form of bcl-X<sub>L</sub> protein operably linked to at least one regulatory sequence.
  7. The method of claim 6, wherein the nucleic acid sequence encodes a human bcl-X<sub>L</sub> protein.
  8. The method of claim 7, wherein the at least one regulatory sequence allows for inducible expression of the bcl-X<sub>L</sub> protein in the T cell.
  9. The method of claim 6, wherein the T cell is virally infected.
  10. The method of claim 9, wherein the T cell is infected with Human Immunodeficiency Virus.
  11. A method for protecting T cells from cell death in an subject comprising administering to the subject at least one agent which stimulates production of bcl-X<sub>L</sub> protein in T cells of the subject, such that the T cells of the subject are protected from cell death.

12. A method for protecting T cells from cell death in an subject comprising administering to the subject a nucleic acid molecule encoding a form of bcl-X<sub>L</sub> protein, such that the T cells of the subject are protected from cell death.
13. The method of claim 12, wherein the subject is infected with Human Immunodeficiency Virus.
14. A method for protecting T cells from cell death in an subject, comprising obtaining T cells from the subject, contacting the T cells *ex vivo* with at least one agent which stimulates production of bcl-X<sub>L</sub> protein in the T cells, and readministering the T cells to the subject, such that the T cells of the subject are protected from cell death.
15. A method for inducing cell death in a population of T cells comprising contacting a population of T cells with at least one agent which inhibits production of bcl-X<sub>L</sub> protein in the T cells, such that T cell death is induced in the population of T cells.
16. The method of claim 15, wherein the at least one agent is an antisense nucleic acid molecule.
17. The method of claim 16, wherein the at least one agent is an intracellular antibody.
18. The method of claim 15, further comprising contacting the population of T cells with an agent which provides a primary activation signal to the T cells.
19. The method of claim 18, wherein the agent which provides a primary activation signal to the T cells is an antigen presented on an antigen presenting cell.
20. The method of claim 16, wherein the agent which provides a primary activation signal to the T cells is an anti-CD3 antibody.
21. The method of claim 18, further comprising contacting the population of T cells with a second agent which blocks a costimulatory signal in the T cell.
22. The method of claim 15, wherein the at least one agent is an antagonist of bcl-X<sub>L</sub> protein.
23. The method of claim 22, wherein the agent is bcl-X<sub>S</sub> or Bad.

24. A method for treating a subject having a T cell associated immune disorder, comprising administering to the subject at least one agent which inhibits production of bcl-X<sub>L</sub> protein in the T cells, such that T cell death is induced in the population of T cells.
- 5 25. The method of claim 24, further comprising administering to the subject an agent which provides a primary activation signal to the T cells.
26. The method of claim 25, wherein the agent is an antigen.
- 10 27. The method of claim 25, further comprising administering to the subject a second agent which blocks a costimulatory signal in the T cells.
28. A method for treating an subject having a T cell associated immune disorder, comprising obtaining T cells from the subject, contacting the T cells *ex vivo* with at least one  
15 agent which inhibits production of bcl-X<sub>L</sub> protein in the T cells, and administering the T cells back to the subject.
29. The method of claim 28, further comprising contacting the T cells *ex vivo* with at least one agent which provides a primary activation to the T cell.
- 20 30. The method of claim 29, wherein the agent which provides a primary activating signal is an antigen presented on an antigen presenting cell.
31. The method of claim 29, further comprising contacting the T cells *ex vivo* with a  
25 second agent which inhibits a costimulatory signal in the T cells.

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